gamma-tocopherol by HPLC µg/g	
Fraction I [a)]	Tr
Fraction II [b)]	Tr
delta-tocopherol by HPLC µg/g	
Fraction I [a)]	N.D.
Fraction II [b)]	N.D.
all-*trans* retinol by HPLC (IU)	
Fraction I [a)]	395,57
Fraction II [b)]	440,47
cholecalciferol by HPLC (IU)	
Fraction I [a)]	N.D.
Fraction II [b)]	N.D.

Data from Professor Robert Ackman's laboratory, Canadian Institute of Fisheries Technology,

Halifax, Nova Scotia.

Data expressed per gram of krill oil.

[a)] : Extraction made with a sample-acetone ratio of 1:6 (w/v), incubated 2h at 4°C.

[b)] : Extraction made with a sample-ethyl acetate ratio of 1:2 (w/v), incubated 30 min at 4°C, following a first extraction with acetone.

TR = trace

N.D. = not detected

Conversion : Vitamin	alpha-tocopherol	mg/g oil x 1,36 = International Unit
	All-*trans* retinol	µg/g ÷ 0,3 = International Unit

TABLE [18]17. ASTAXANTHIN AND CANTHAXANTHIN CONTENT OF KRILL OIL (*E. pacifica*)

Asthaxantin (µg/g oil)	
Fraction I [a)]	93,1
Fraction II [b)]	121,7
Canthaxanthin (µg/g oil)	
Fraction I [a)]	270,4
Fraction II [b)]	733,0

Data from Professor Robert Ackman's laboratory, Canadian Institute of Fisheries Technology,
Halifax, Nova Scotia.

[a)] : Extraction made with a sample-acetone ratio of 1:6 (w/v), incubated 2h at 4°C.

[b)] : Extraction made with a sample-ethyl acetate ratio of 1:2 (w/v), incubated 30 min at 4°C, following a first extraction with acetone.

TABLE [19]18. OPTIMAL CONDITIONS FOR LIPID EXTRACTION OF AQUATIC ANIMAL TISSUES (suggested procedure)

STEP	CONDITIONS
Grinding (if particles > 5mm)	4°C
Lipid extraction	sample-acetone ratio of 1:6 (w/v) 2h (including swirling 20 min) 4°C
Filtration	organic solvent resistant filter

	under reduced pressure
Washing	sample-acetone ratio of 1:2 (w/v) pure and cold acetone
Filtration	organic solvent resistant filter under reduced pressure
Evaporation	under reduced pressure
Oil-water separation	4°C
Lipid extraction	sample: ethyl acetate ratio of 1:2 (w/v)[a)] pure ethyl acetate 30 min 4°C [b)]
Filtration	organic solvent resistant filter under reduced pressure
Evaporation	under reduced pressure

[a)]: Ethanol can be replaced by isopropanol, *t*-butanol or ethyl acetate.

[b)]: 25 °C when using *t*-butanol.

TABLE [20]19: PROTEOLYTIC ACTIVITY OF KRILL RESIDU USING LACTOSERUM AS THE SUBSTRATE, AT 37 °C, PH 7.0 FOR A RATIO ENZYME:SUBSTRATE OF 1:43

Time (min)	Amino acids released (µmoles)	Enzymatic rate (µmoles/min)	Specific activity	enzymatic